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Impact of Medical Libraries on Clinical Decision-Making in Pakistan

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ABSTRACT

Library users of medical libraries are life savers. Medical libraries play a very active role in quenching the information thirst of their users. The focus of this study is on the impact of medical libraries on clinical decisions of the medical practitioners in Pakistan. Quantitative research approach was used to undergo the study. Journals were reported as the most used library resources in the medical libraries in Pakistan. Medical literature housed in these libraries have a great impact on the clinical decisions of the medical doctors working in hospitals of Khyber Pakhtunkhwa, Pakistan. Provision of latest, relevant and sufficient medical literature to the library users of these medical libraries is the cry of the day.

KEYWORDS: *Medical Libraries- Pakistan, Clinical decision-Pakistan, impact-medical libraries-clinical decision making, clinical decision making-Pakistan*

INTRODUCTION

For the quality of medical care, the communication of medical information is an important factor. Therefore, health information service should form an integral part of the national health system. Adequate, up-to-date and timely information must be available to enhance quality performance. However, there is a tremendous amount of new medical information being produced in various languages. This is why high-quality information centers are necessary to provide the much-needed support for health care delivery. Such information centers need to anticipate users' needs and supply comprehensive and current answers to practitioners' questions. Pakistan has made some progress in the area of health information needs¹. Uwem explained data as information that have been exposed to some handling capacities fit for noting a client's inquiry, be it recorded, summed up, or essentially gathered, that would help in decision-making². Ajidahun expressed that information needs were work related. Akusu revealed that information needs is not similar as the area of interest is different the author further stated that most of the researcher mad their own arrangement like purchasing of journals and books for the purpose to keep up-to-date themselves regarding their field of specialization. ⁴. Kumar underscored the function of information in the provision of value clinical facilities⁵. Muller and Stinson revealed that 258 doctors of deferent departments recorded that medical literature is the main source of information⁶. Personally found that, in-touch with other doctors, using of textbooks and journals was the main source of information consulted by the medical researchers⁷. Ajayi,N.A. reported that information provided

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by the libraries has a tremendous effect on psychiatric patient care.⁸ Osiobe stated that in Nigerian universities, journals were the main source of information used by the medical researchers.⁹ Marshall stated in his study that information received from the library is directly impacted on clinical decision-making.¹⁰ Hardy revealed in her investigation that "the library has started to move from a prevalently clinical help facility to a wide scope of supporting the whole medical care setting"¹¹. The objective of this study therefore is to investigate the impact of information provided by the medical library on clinical decision-making of medics in Pakistani teaching hospitals.

METHODOLOGY

This study was carried out during the 2020/21 session and delimited to medical doctors in two teaching hospitals of Peshawar-Pakistan. These are the Lady Reading Hospital (LRH), and Hayatabad Medica Complex (HMC). Fifty medical doctors out of an estimated 80 in the two teaching hospitals were randomly selected. A closed ended questionnaire was developed. The data collection instrument was sent to three experts for validity. The changes suggested by the experts were incorporated accordingly. A pilot study was also carried out to check the reliability of the instrument. The refined and approved questionnaire was distributed among the doctors of HMC & LRH at their respective libraries. A total of fifty questionnaires were distributed & 40 were returned with eight percent response. Emails, Telephone calls and Short Message Service (SMS) were used as Follow-up tools. The data collected were edited, analyzed and the results were tabulated with relevant headings. Descriptive statistics were used to analyze the data by applying SPSS 20 version.

RESULTS AND DISCUSSION

This study is based on the responses received from medical doctors of selected hospitals in Khyber Pakhtunkhwa-Pakistan: a north west province of the country.

TABLE-I: Distribution of respondents

Institution	No. of respondents	No. of questionnaires returned	%age
HMC	30	22	73.3
LRH	20	18	90
Total	50	40	80

The medical practitioners were asked to respond about the nature and status of medical literature used for their clinical practices. Efforts were made to know whether the available medical literature has positive impact on their clinical decision-making? As mentioned, self-constructed closed ended questionnaire was used for acquiring the desired results. The researchers distributed 50 copies of questionnaires among the doctors of HMC & 40 copies LRH doctors. Out of 40 questionnaires, 22 were returned from HMC doctors 73.3% and 18 responded from LRH doctors with 90.00% response rate.

TABLE-II: Information sources consulted

Information sources consulted	No. of respondents	% age
Information sources	28	70.0
Contact with professional colleagues	26	65.0
Personal record of information	24	60.0
Textbooks and monographs	37	92.5
Learned journals	20	50.0
Conference proceedings	18	45.0
Seminars and workshops	25	62.5
In-house memoranda	15	37.5
Newsletters and bulletins	26	65.0
Indexes, abstracts and reviews	11	27.5
Medical librarian	12	30.0
Library catalogue	15	37.5
IT i.e. CD-ROMS	8	20.0
Microfilms, video, slides and tapes	22	55.0
Electronic and printed media	1	2.5
local and foreign correspondence courses		

A query was asked from the doctors of Lady Reading Hospital and Hayat Abad Medical Complex about the information sources consulted during the clinical decision making. Textbooks and monographs were reported as the more consulted learning resources. The analysis of data reflected that medical practitioners also prefer to contact their professional colleagues for acquiring their needed information. Seminars and workshops were also given a due weightage by the respondents for the enhancement of their knowledge base in their relevant field. The results of Stinson and Muller¹⁵ were almost the same. They have also pinpointed textbooks and monographs as the most cited medical literature. Jan, S., Hussain, A., Ibrahim, M., & Saeed, S. (2018) recommended Email, social networking, sports, career development, research and teaching and recreation and news were the sources consulted by the respondents.

TABLE-III

TABLE III- Frequency of library use

	Frequency	%
Everyday	6	15
About once a week	19	47.5
Two or three times a month	14	35
Never	1	2.5

Table III presents the results about the frequency of literature used by doctors in Peshawar Pakistan. It was depicted that majority of the doctors consult the medical literature once in a week. Daily usage of medical literature by medical practitioners in the two hospital of Peshawar region were reported as at second position in the ranking in Table III. Never usage was next to nil as per given data. Hussain, A., & Jan, S. U. (2018) reported that majority of the respondents are using the

library on daily basis, one-fourth are consulting the library 3 times a week. It was suggested that most of the respondents do not use the Library regularly.

TABLE-IV: Conduction of literature searches

Responses	No. of respondents	%
Librarian	36	90.0
Self	4	10.0
Total	40	100

Table-IV shows that (90.0%) of the doctors contact the librarians for literature search. Adimorah's^{16,17} findings are totally opposite to our study as he stated that scientists prefer to search themselves. The author reported that there was no adequate stock of medical literature for medical officers at LRH, only 22.2% of the doctors were satisfied from the library resources while the rest of doctors were not satisfied (72.2%). 50% of the doctors stated that the collection of HMC library has rich collection. Majority of the respondents reported that the information provided by these medical libraries has a significant impact on clinical decision-making (Table-V). The same results were recorded by Marshall¹⁸.

TABLE-V: Level of Satisfaction

Response	LRH	PGMI
Very good	0(0)	0(0)
Good	0(0)	5(22.7)
Fair	4(22.2)	11(50.0)
Poor	13(72.2)	6(27.3)
Very poor	1(5.6)	0(0)
Total	18	22

Table-V deals with the level of satisfaction of medical doctors with the medical literature available in the libraries of LRH and HMC. It was portrayed from the analysis of the above table that about half of the respondents are fairly satisfied from the learning resources of these libraries. The position of HMC is little bit better than LRH library as majority of the library users at LRH are not satisfied from their resources. Al Kuwaiti (2020) pinpointed that the library resources and services provided to those medical students are flexible and are just enough to fulfill the learning needs of the respondents without hindering performance. It was suggested that appropriate strategies should be adopted to improve the medical students' satisfaction level towards the library resources and services offered at Saudi universities.

TABLE-VI: Assessment of the clinical value of information

Criteria	Response	%
Relevant	29	72.5
Provided new information of clinical value therefore	34	85.0
Saved patient(s) life		
Contributed to patient care management	21	65.0
Saved consultation time	16	40.0

The analysis of above Table reflects that the information provided by these medical libraries have helped them to save the life of patients. It was further reported that the information received from the libraries of LRH and HMC are relevant and are contributing towards the management of patient care.

TABLE-VII: Activities about which information is sought

Activities	No. of respondents	%
Management of patients	24	60.0
About new drugs	29	72.5
Diagnosis of ailments	31	77.5
Research	11	27

Efforts were made to show the areas of interest of the medical doctors of Lady Reading Hospital and Hayatabad Medical Complex Hospital Peshawar. It was elaborated that doctors usually sought information for diagnosis of ailments and new drugs. Research was also reported a major area of interest of doctors. Management of patients were also declared as an area of interest of medical practitioners in Peshawar-Pakistan.

CONCLUSION

As per the requirements of the Medical doctors, medical libraries should be will equipped with latest and up-to-date information. Most of the complaints received by the library users were related to Information Communication Technology (ICT). The study revealed that the professional staff is well trained and has the potential to provide the needed information to the users. It was pinpointed that no user advisory services regarding MEDLINE databases is available in the libraries of LRH and HMC. Higher ups of LRH need to focus on provision of latest learning resources to their attached medical library as most of the users are not satisfied in this connection. Subscription of peer reviewed and impact factor journal should be given attention. The administrators of these teaching hospital should have to allocate a reasonable amount of budget for the development of their libraries. In order to enhance the satisfaction level of the Medical Practitioners of LRH and HMC, the libraries should be equipped with latest and relevant learning material. The online searching and information literacy skills of the doctors should be improved through seminars, workshops and training sessions.

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